

HIGH MOBILITY PLANE CMOS SOI

Abstract

Disclosed is an integrated circuit structure that has a substrate having at least two types of crystalline orientations. First-type transistors (e.g., NFETs) are formed on first portions of the substrate having a first type of crystalline orientation, and second-type transistors (e.g., PFETs) are formed on second portions of the substrate having a second type of crystalline orientation. Some of the first portions of the substrate comprise non-floating substrate portions, and the remaining ones of the first portions and all of the second portions of the substrate comprise floating substrate portions.